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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

HECK, MICHAEL C

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,889

Applicant(s)

HIND ET AL.

Examiner

Michael C. Heck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-27 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 03 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Final Office Action is responsive to applicant's amendment filed 06 September 2005. Applicant amended claims 1-4, 6, 8, 11-15, 17, 19-23 and 25. Currently, claims 1-27 are pending.

Response to Amendment

2. The objection to the drawings in the last Office Action has been overcome by the applicant's amendment to the specification.
3. The objection to the specification in the last Office Action has been overcome by the applicant's amendment to the specification.
4. The 35 USC §101 rejection in the last Office Action for claims 1-10 have been overcome by the applicant's amendment to the claims.

Response to Arguments

5. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection. Applicant asserts the prior art of record does not teach or suggest product information comprising non-unique identification information to enable the inferring of identifying characteristics of a particular person. Welling (Welling, Unveiling AIM's store of the future, part I, Apparel Industry Magazine, Vol. 6, No. 2, February 2000, p.24-31 [DIALOG: file 15]) teaches a tag on a garment could tell you that this is a yellow dress, what size it is, where it was made, when it was shipped and when it was received. When you walk into a dressing room with a black

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dress, the RFID tag on the dress would trigger a flat screen in the dressing room to roll video showing you the same dress in the other colors its available in, along with accessories to go with it (Para 23-26). Implicitly, a black dress and what size it is enables inferring of identifying characteristics of a particular person, i.e., what size that person wears, as well as identifying the same dress, i.e., size, in the other colors. Please see the 35 USC §103(a) rejection below.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-2, 4-12 and 14-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (Jones, Working Without Wires, Industrial Distribution, August 1999, p. M6, M8-M9 [PROQUEST]) in view of Welling (Welling, Unveiling AIM's store of the future, part I, Apparel Industry Magazine, Vol. 6, No. 2, February 2000, p.24-31 [DIALOG: file 15]). Jones discloses an identification and tracking of persons using RFID-tagged items in store environments comprising:

- **[Claim 1]** storing on a computer transaction information associated with a plurality of different persons (Para 10, Jones teaches RFID enables retailers to become better acquainted with their customers through the collection and storage of vital information on buying patterns.);
- collecting product information from RFID-tagged items carried on a particular person, (Para 10, Jones teaches loyalty cards: Shell, Mobile, and other

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gasoline vendors are giving customers RFID tags that provide instant credit authorization at the pump. In addition to speeding purchases and making transactions more efficient, RFID enables retailers to become better acquainted with their customers through the collection and storage of vital information on buying patterns. The Examiner interprets the RFID-tagged item is the loyalty card that is carried by the customer.);

- correlating, using said computer, the product information with the transaction information (Para 10, Jones teaches that in addition to speeding purchases and making transactions more efficient, RFID enables retailers to become better acquainted with their customers through the collection and storage of vital information on buying patterns. The Examiner interprets product information, i.e., buying patterns, relates to the transactions since that is how the information is received.); and

Jones fails to teach said product information comprising non-unique identification information and inferring identifying characteristics associated with the particular person based on results of the correlating step. Welling teaches a tag on a garment could, for example, tell you that this is a yellow dress, what size it is, where it was made, when it was shipped and when it was received. You've got the whole history of this dress, and the similar histories of each of the dresses in that box when it arrives at retail, which is read instantly by the receiver-transmitter and verified against the electronic ASN that was transmitted to the store as the shipment was released from the distribution center. Today, when a customer takes an item into a dressing room, we're told that 85% of the time they walk out, put the item back on the shelf, and leave without purchasing anything. What we're proposing is this: when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever (Para 23 and 26). Implicitly, a black dress and what size it is enables inferring of identifying

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characteristics of a particular person, i.e., what size that person wears, as well as identifying the same dress, i.e., size, in other colors to be presented to the potential customer. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the non-unique identification information and personal characteristics information of Welling with the teachings of Jones since Jones teaches that it is old and well known in the to use RFID tags for consumer-oriented applications (Para 9). Speed and accuracy of information flow is critical in the supply-chain process. Jones teaches inexpensive RFID tags, embedded in products during production, provide a disposable electronic manifest at the item or package level. Welling teaches putting a factor of 10 into the speed at which items are counted and tracked along the supply chain (Para 21). Both Jones and Welling teach using RFID tags in the supply chain process therefore there is a motivation or suggestion to combine. While Jones gives two consumer-related examples for the use of RFID tags, Jones gives another example in the retail clothing industry therefore there is an expectation of success. Jones and Welling teach all the claim limitations as identified.

- **[Claim 2]** wherein the identifying step infers demographics of the particular person based on the results of the correlating step (Welling: Para 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever. Welling strongly suggest the demographic of being a woman would be inferred.).
- **[Claim 4]** tracking the particular person as the particular person roams through roaming areas using the inferred identifying characteristics and the product information associated with the particular person (Jones: Para 13, Jones teaches new advanced products are designed to read at longer ranges with the intent of tracking people and assets, wherever they may roam.

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Welling: Para 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever.).

- **[Claim 5]** providing targeted advertising using information obtained from said tracking step (Welling: Para 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever.).
- **[Claim 6]** wherein the product information includes an SKU number associated with a product. (Jones: Para 3 and 7, Jones teaches passive RFID tags, embedded in products, provide a disposable “electronic” manifest at the item or package level. RFID tags are seen as a replacement for bar codes. Welling: Para 22, Welling teaches the RFID chip is part of what Sensormatic calls its SmartEAS (electronic article surveillance) program. These chips are applied either by adhesive label (for packed boxes) or imbedded inside traditional plastic security tags (for individual items) anywhere along the supply chain. The Examiner interprets SKU to be a stock keeping unit that is a unique number that is associated with a specific product and is typically encoded on a bar code attached to or printed on the product. Both Jones and Welling infer the product information include an SKU number since RFID are to replace bar codes and are used as individual item security tags.).
- **[Claim 7]** wherein the RFID-tagged items include RFID tags incorporated therein and carrying the product information (Jones: Para 3 and 7, Jones teaches passive RFID tags, embedded in products, provide a disposable “electronic” manifest at the item or package level. RFID tags are seen as a replacement for bar codes.).
- **[Claim 8]** collecting RFID tag information from the RFID-tagged items carried on the person and storing said collected RFID tag information on a computer, said RFID tag information comprising non-unique identification information (Jones: Para 10, Jones teaches loyalty cards: Shell, Mobile, and other gasoline vendors are giving customers RFID tags that provide instant credit authorization at the pump. The Examiner interprets the RFID-tagged item is the loyalty card that is carried by the customer. Welling: Para 23 and 26, Welling teaches a tag on a garment could, for example, tell you that this is a yellow dress, what size it is, where it was made, when it was shipped and when it was received. You’ve got the whole history of this dress, and the

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similar histories of each of the dresses in that box when it arrives at retail, which is read instantly by the receiver-transmitter and verified against the electronic ASN that was transmitted to the store as the shipment was released from the distribution center. When you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever.);

- associating movements of the person with the collected RFID tag information as the person roams through roaming areas using said computer (Welling: 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever; and
- inferring the identity of the person in the roaming areas based on the results from the associating step, using said computer (Welling: Para 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever. Welling strongly suggest the identity of the person would be inferred to be a woman.).
- **[Claim 9]** wherein, in the associating step, the person is associated with the collected RFID tag information without using any information about the exact identity or purchase records of the person (Jones: Para 12 and 13, Jones teaches RFID systems are capable of detecting the passage of assets past fixed points in a fixed process. For example, RFID readers as part of a manufacturing process will read all tags passing a particular point. New advanced products are designed to read at longer ranges with the intent of tracking people and assets, wherever they may roam. Welling: Para 26, Welling teaches when you walk into a dressing room with, say, a black dress, the RFID tag on the dress would trigger a flat screen in your dressing room to roll video showing you that same dress in the other colors its available in, along with accessories to go with it – coordinating wraps, purses, shoes, jewelry, whatever. Welling strongly suggest the identity of the person would be inferred to be a woman.).
- **[Claim 10]** wherein the RFID-tagged items include RFID tags incorporated in the RFID-tagged items, said RFID tags carrying product information (Jones: Para 3 and 7, Jones teaches passive RFID tags, embedded in products,

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provide a disposable "electronic" manifest at the item or package level. RFID tags are seen as a replacement for bar codes. Welling: Para 23, Welling teaches a tag on a garment could, for example, tell you that this is a yellow dress, what size it is, where it was made, when it was shipped and when it was received. You've got the whole history of this dress, and the similar histories of each of the dresses in that box when it arrives at retail, which is read instantly by the receiver-transmitter and verified against the electronic ASN that was transmitted to the store as the shipment was released from the distribution center.).

Claims 11-12, 14-20 and 22-27 substantially recite the same limitations as that of claims 1-2 and 4-10 with the distinction of the recited methods being a system and computer readable medium. Hence the same rejection for claims 1-2 and 4-10 as applied above applies to claims 11-12, 14-20 and 22-27.

8. **Claims 3, 13 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (Jones, Working Without Wires, Industrial Distribution, August 1999, p. M6, M8-M9 [PROQUEST]) in view of Welling (Welling, Unveiling AIM's store of the future, part I, Apparel Industry Magazine, Vol. 6, No. 2, February 2000, p.24-31 [DIALOG: file 15]) and further in view of DeTemple et al. (U.S. Patent 5,995,015). As to claim 3, Jones and Welling disclose an identification and tracking of persons using RFID-tagged items in store environments but fail to teach wherein the identifying step infers the exact identify of the particular person based on the results of the correlating step. DeTemple et al. teach a means to read previously recorded demographic information about the customer associated with the sales transaction in progress at a specific POS terminal. A tracking transmitter for tracking the path taken by a customer while shopping is used where data on the products purchased and the identification of the shopping cart are

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linked to the path taken by the shopping cart in the store. Customer card information comprises customer identification (col. 8, lines 18-27 and col. 9, lines 21-44). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Jones and Welling to exactly identify a particular person since Jones teaches collection and storage of vital information on buying patterns (Para 10). Learning about the customer helps merchants to be better prepared to meet the customer's needs. Jones teaches aggressive marketing programs as a result of user awareness of RFID (Para 9). Welling teaches tracking products within a retail establishment, i.e., when a customer takes an item into a dressing room for active merchandising (Para 26). DeTemple et al. teach most modern retail stores implement some method of tracking the path customers take while shopping, to determine shopping habits and effects of advertising, product placement, etc. (col. 2, lines 54-63). Therefore, Jones, Welling and DeTemple et al. teach using knowledge received from the customer to be better prepared to meet the customer's needs. Jones, Welling and DeTemple et al. collect information about customers therefore there is motivation to combine with a reasonable expectation of success. All the claim limitations are either suggested or taught by Jones, Welling and DeTemple et al.

Claims 13 and 21 substantially recite the same limitations as that of claim 3 with the distinction of the recited methods being a system and computer readable medium. Hence the same rejection for claim 3 as applied above applies to claims 13 and 21.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Quinlan (Quinlan, Radio Tags – The New Identifier, Handling & Shipping Management, Vol. 26, April 1985, start p. 90 [DIALOG: file 148]) discloses RFID tags that contain its own unique multi-digit code. Variable data can be stored in a coded message, which bar codes cannot do.

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- Langnau (Langnau, Application in RFID, Materials Handling Management, Vol. 55, No. 9, September 2000, p. 43-45 [DIALOG: file 15]) discloses RFID has many supply chain applications.
- Want et al. (Want et al., Ubiquitous Electronic Tagging, Submitted to IEEE Concurrency, December 1999 [GOOGLE]) discloses uses of electronic tags.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:


**Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Or faxed to:

(571) 273-8300 [Official communications; including After Final communications labeled "**Box AF**"]

(571) 273-6730 [Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

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03 November 2005


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